Hazardous Waste Storage and Management

Fort Wainwright, Alaska

Environmental Officer Course

2011

Outline

I. Storage
   A. Satellite Accumulation Areas
   B. Hazardous Waste Accumulation Areas
II. Management
III. Turn In
IV. Disposal
V. Where to Obtain Assistance

Regulations

- U.S. EPA Resource Conservation and Recovery Act Regulations 40 CFR Parts 260-280
- Alaska Title 18 Chapter 62
- DoD
- AR 200-1
- USARAK 200-1

Criminal Liability

Criminal Penalties

- Up to 5 years in jail

Civil Penalties

- Up to $37,500 per day per violation

Military/Federal Civilian Liability

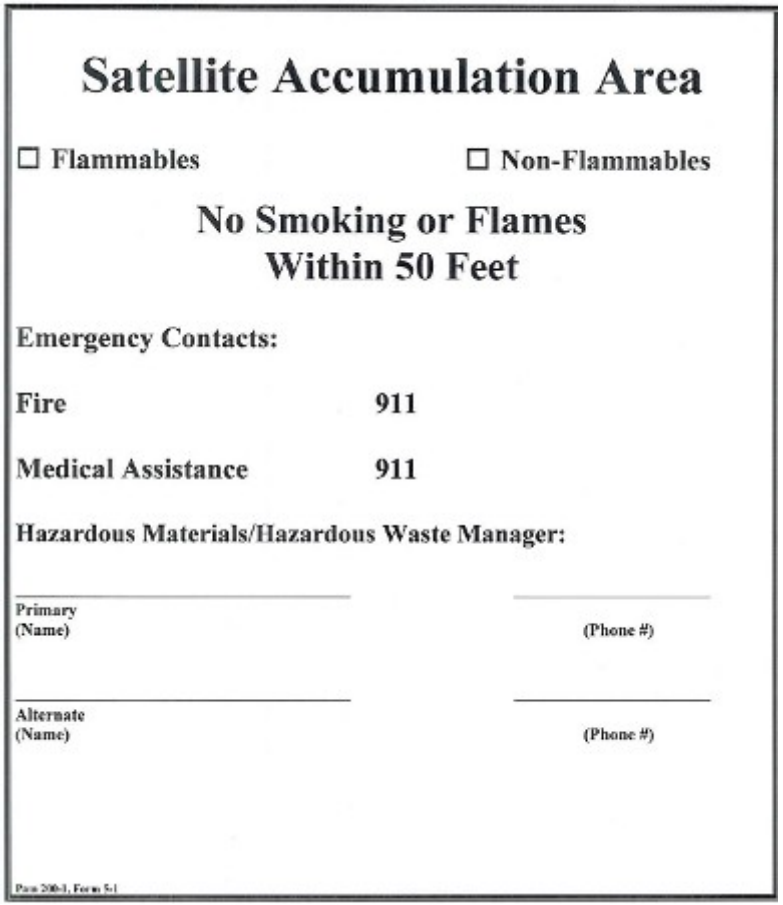
- UCMJ for Military
- Title 18 USC for Civilians

Storage and Management

- Storage Options
  - Satellite Accumulation Areas (SAA)
    - At or near the point of generation
    - Regulations limit the amount of waste stored
  - Hazardous Waste Accumulation Areas (HWAA)
    - Do not have to be at or near the point of generation
    - Regulations limit the time the waste is stored but not the amount

SAA/HWAA – Setting one up

- Step 1
  - Contact PWE to establish an SAA
  - PWE and ECC will require unit to assign and train HM/HW Manager and Alternate
    - 16-hour initial training
    - 8-hour refresher
  - Once site is established
    - Labeled storage containers and spill response equipment are provided from ECC by request
  - Sites are inspected by PWE and ECC
    - ECC inspects weekly
    - PWE does unannounced inspections



Satellite Accumulation Area

☐ Flammables ☐ Non-Flammables

No Smoking or Flames Within 50 Feet

Emergency Contacts:

Fire 911

Medical Assistance 911

Hazardous Materials/Hazardous Waste Manager:

Primary (Name) (Phone #)

Alternate (Name) (Phone #)

SAA – Location

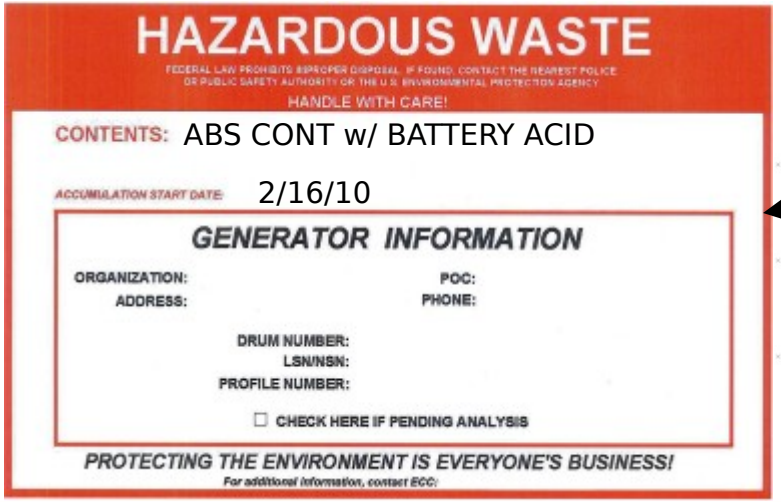
- Located at or near the point of generation
- Under the control of the operator
- In an area such that accidental spills and discharges do not flow down a drain or to stormwater runoff

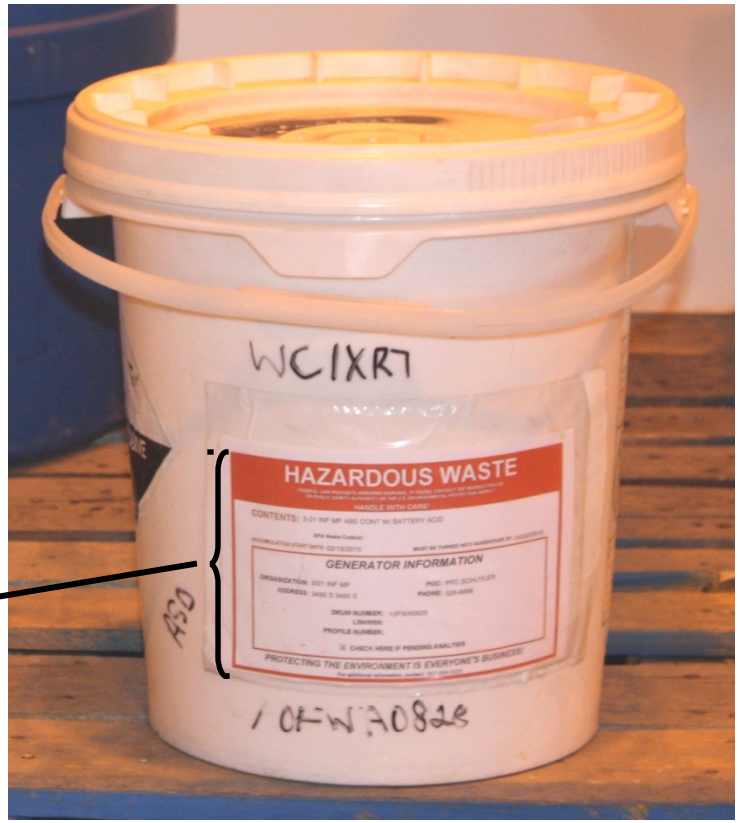
SAA – Quantity Limits

- Quantity limits
  - 55 gallons for non-acute or 1 quart acute HW
  - Generator has 3 days to remove the waste once the quantity has been reached.

SAA Requirements - Labeling

- Labeling
  - Containers come pre-labeled
    - ensure personnel place waste in the appropriate containers





SAA Requirements – Labeling

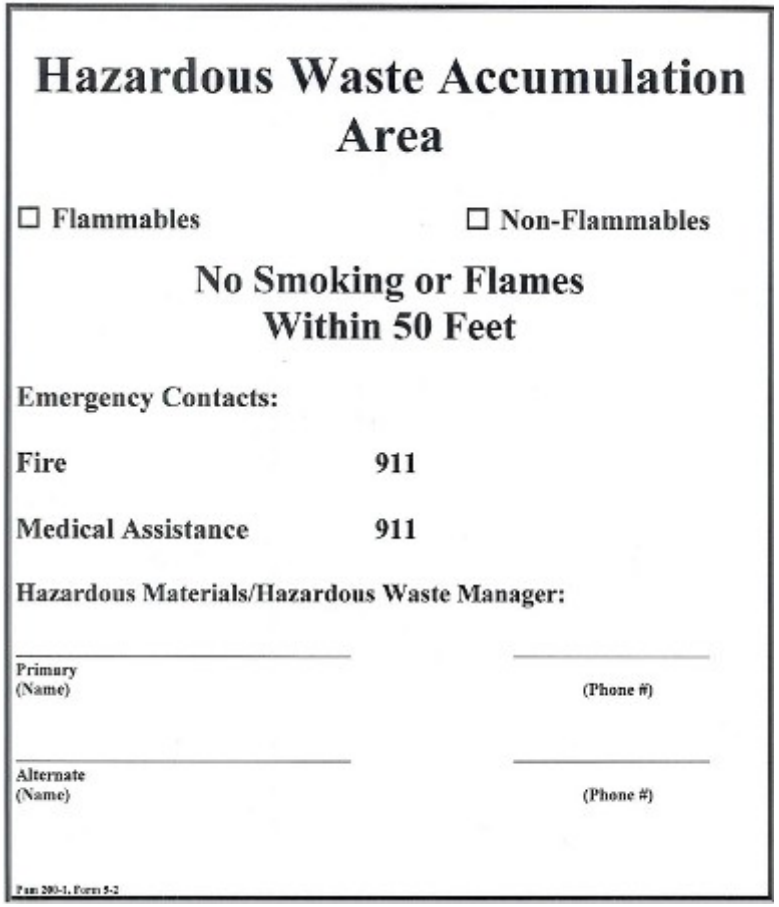
- Labeling
  - In addition to the HW waste label, flammable wastes must have the following DOT flammable liquid label.
  - Metal conta[illegible]st also be grou

SAA - Other

- POL, UW and Non regulated wastes may be accumulated in the SAA

HWAA Management

- Accumulate HW for a maximum of 90-days
  - Time starts when first drop enters container.
  - Waste generated at units/facilities must be moved to Bldg 3489 at the 45 day mark.
    - Waste must be off post in 90-days to stay compliant with State and Federal requirements.
- Unlimited amount of waste that can be stored



Hazardous Waste Accumulation Area

☐ Flammables ☐ Non-Flammables

No Smoking or Flames Within 50 Feet

Emergency Contacts:

Fire **911**

Medical Assistance **911**

Hazardous Materials/Hazardous Waste Manager:

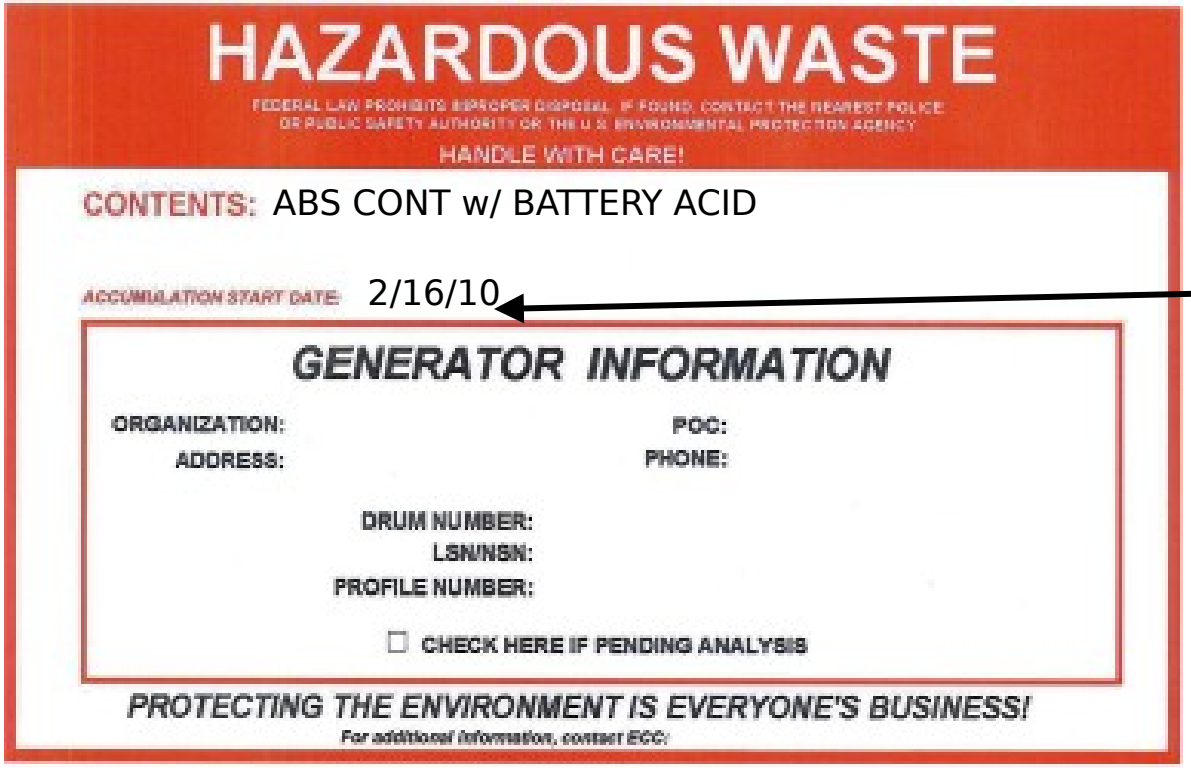
Primary (Name) (Phone #)

Alternate (Name) (Phone #)

Pam 200-1, Form 5-2

HWAA Requirements - Labeling

- Labeling
  - Same as SAA

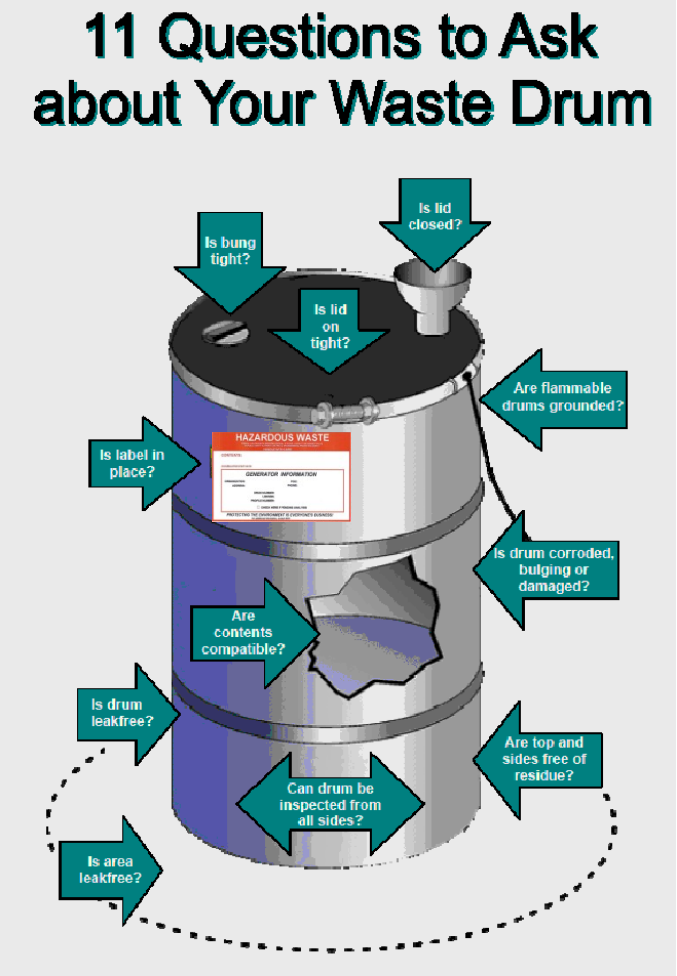


Must be moved to Bldg 3489 forty-five days following the date waste was first placed into the container.

HWAA Requirements – Labeling

- Labeling
  - Flammable wastes must have the following DOT flammable liquid label.
  - Metal containers with flammable liquids must also be grounded.

SAA/HWAA Management


11 Questions to Ask about Your Waste Drum
Is lid closed?
Is bung tight?
Is lid on tight?
Are flammable drums grounded?
Is label in place?
HAZARDOUS WASTE
Is drum corroded, bulging or damaged?
Are contents compatible?
Is drum leakfree?
Are top and sides free of residue?
Can drum be inspected from all sides?
Is area leakfree?

CLOSED Containers

- Containers at SAAs and HWAAs MUST be closed at ALL times unless waste is actively being added or removed

HWAA – Storage

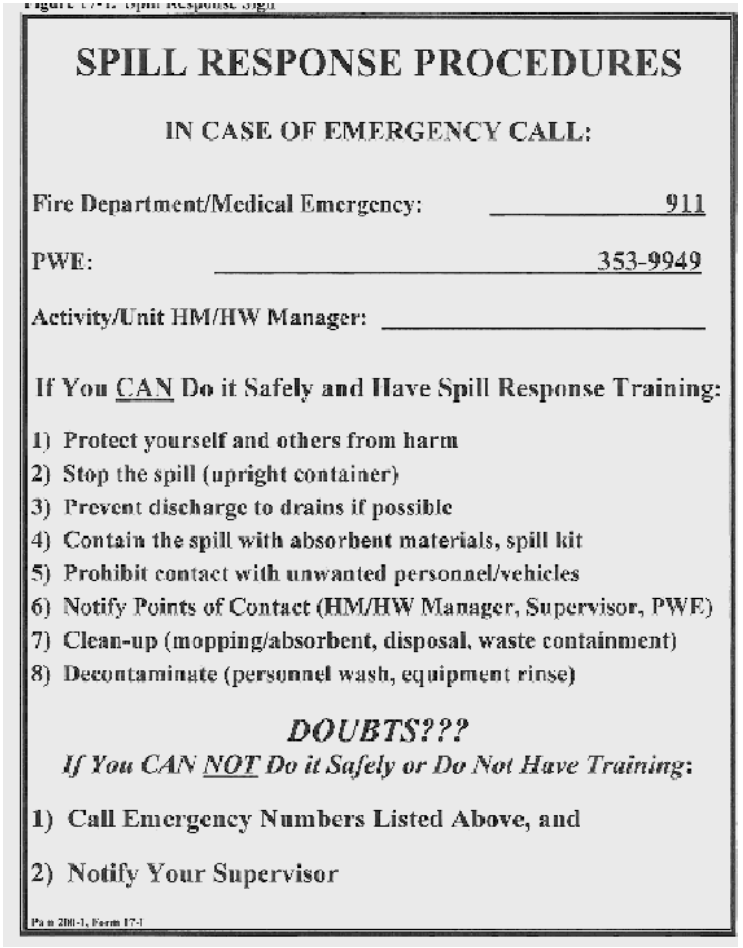
- Secondary Containment
  - Capacity to contain 10% volume of all containers or entire volume of largest container, whichever is greater.

HWAA – Storage

- Flammable and reactive materials will be 50 feet from the installation boundary.
- Installation spill contingency plan must be in place.
- Areas must prevent unauthorized entrance.
- Must have alarm, communication device and fire.

Spill Response

- Spill response procedures MUST be available at ALL accumulation areas.



SPILL RESPONSE PROCEDURES

IN CASE OF EMERGENCY CALL:

Fire Department/Medical Emergency: 911

PWE: 353-9949

Activity/Unit HM/HW Manager: _____

If You CAN Do it Safely and Have Spill Response Training:

1) Protect yourself and others from harm
2) Stop the spill (upright container)
3) Prevent discharge to drains if possible
4) Contain the spill with absorbent materials, spill kit
5) Prohibit contact with unwanted personnel/vehicles
6) Notify Points of Contact (HM/HW Manager, Supervisor, PWE)
7) Clean-up (mopping/absorbent, disposal, waste containment)
8) Decontaminate (personnel wash, equipment rinse)

DOUBTS???

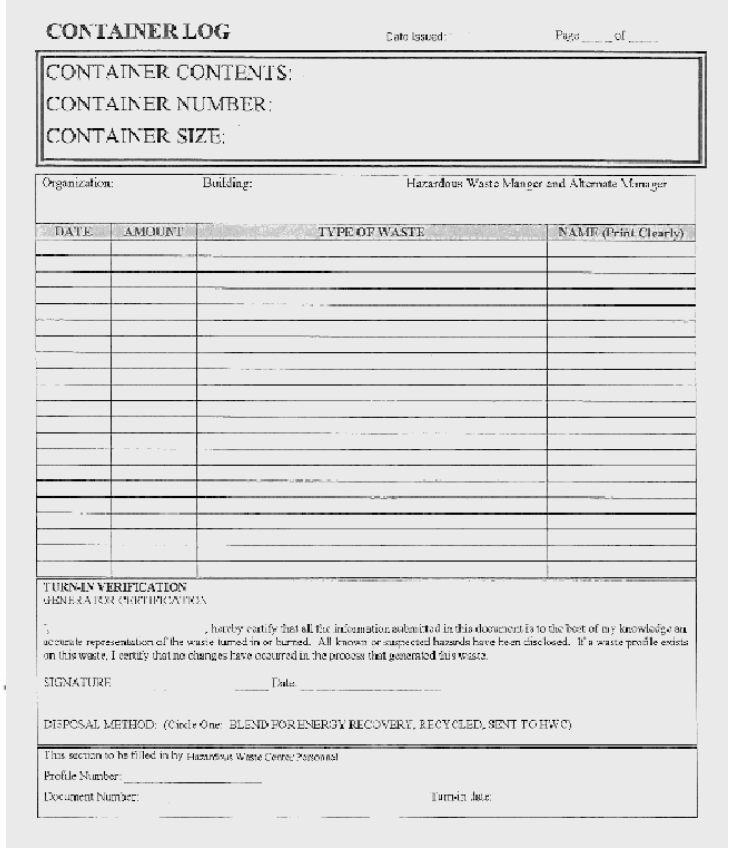
If You CAN NOT Do it Safely or Do Not Have Training:

1) Call Emergency Numbers Listed Above, and

2) Notify Your Supervisor

Inspections Record Keeping

- Inspections
  - HW Manager must do weekly inspections for SAAs and HWAAs
  - Followed up by weekly inspections by ECC
  - PWE will do periodic unannounced inspections
- Container Log
  - Completed EACH time waste is added



CONTAINER LOG

Date Issued: Page ____ of ____

CONTAINER CONTENTS:
CONTAINER NUMBER:
CONTAINER SIZE:

Organization: Building: Hazardous Waste Manger and Alternate Manager

DATE	AMOUNT	TYPE OF WASTE	NAME (Print Clearly)

TURN-IN VERIFICATION
GENERATOR CERTIFICATION

I, _____, hereby certify that all the information submitted in this document is to the best of my knowledge an accurate representation of the waste turned in or burned. All known or suspected hazards have been disclosed. If a waste profile exists on this waste, I certify that no changes have occurred in the process that generated this waste.

SIGNATURE _____ Date _____

DISPOSAL METHOD: (Circle One: BLEND FOR ENERGY RECOVERY, RECYCLED, SENT TO HWC)

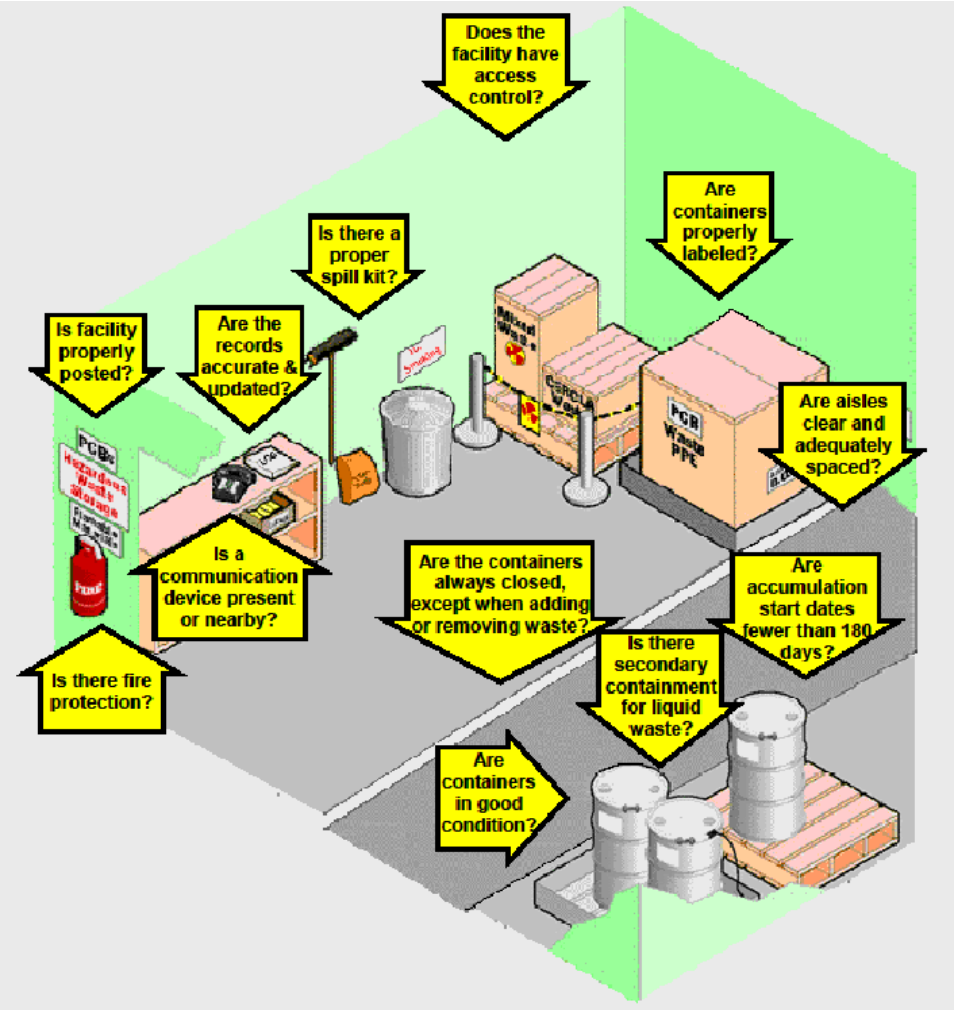
This section to be filled in by Hazardous Waste Center Personnel

Profile Number: _____

Document Number: _____ Turned Into: _____

HAZARDOUS WASTE STORAGE AND MANAGEMENT

HWAA


Does the facility have access control?
Are containers properly labeled?
Is there a proper spill kit?
Is facility properly posted?
Are the records accurate & updated?
Are aisles clear and adequately spaced?
Is a communication device present or nearby?
Are the containers always closed, except when adding or removing waste?
Are accumulation start dates fewer than 180 days?
Is there fire protection?
Is there secondary containment for liquid waste?
Are containers in good condition?

Empty Container Management

- Non-acute HW
  - Ensure no more than 1-inch of residue or 0.3% by weight remains in bottom of a 110-gallon or less sized container
  - Remove or paint over labels
  - Dispose of as regular trash
- Acute HW
  - Dispose of as HW

Empty Container Management

- Compressed Gas Cylinders
  - Considered empty when the pressure in the cylinder approactes atmospheric
    - No gas come out when the valve is open
  - Turn in vendor owned cylinders to vendor
  - Turn in empty government owned, (unusable, damaged, deteriorating) to ECC

Other Wastes

- Universal Wastes
  - Covered during independent presentation
- Used Oil
- Non-regulated wastes

Used Oil

- Any oil that has been:
  - Refined from crude oil or any synthetic oil
  - Has been used
  - As a result of being used is contaminated with physical or chemical impurities

Used Oil

- "On Spec" used oil must not exceed the following allowable levels:

Constituent	Level
Arsenic	5 ppm
Cadmium	2 ppm
Chromium	10 ppm
Lead	100 ppm
Flash Point	≥100° F
Total Halogens	4000 ppm

Used Oil Mixtures

- Three types are generated at FWA
  - Petroleum-derived and synthetic used oils
  - Materials contaminated with used oil (i.e. rags, adsorbents, oil filters and sorbent materials such as vermiculite)
  - Mixtures of used oil with used fuel having a flashpoint >100° F

Used Oil Mixtures

- Used oil + listed HW = listed hazardous waste
- Used oil + characteristic HW = used oil ONLY if mixture does not exhibit any hazardous characteristic

Used Oil Label

USED OIL

CONTENTS:

GENERATOR INFORMATION

ORGANIZATION: POC:

ADDRESS: PHONE:

DRUM NUMBER:

LSN/NSN:

PROFILE NUMBER:

PROTECTING THE ENVIRONMENT IS EVERYONE'S BUSINESS!

For additional information, contact ECC:

Used Oil Management

- DO NOT mix other substances with used oil
- Ensure containers are closed unless adding or removing waste
- Inspect containers daily

Used Oil Documentation

- PWE will sample used oil waste streams once every 2 years
- Profile must be available for EACH used oil waste stream
- Document recycling efforts on Daily Inspection and Monthly Reclycling Log

Used Oil Filters

- Do NOT drain
- Place in drum/container labeled “Used Oil Filters”

Waste Turn-In

- At turn-in, containers must be:
  - Accompanied by:
    - Container log (when applicable)
    - MSDS or Waste Profile Sheet
  - Be in good condition
  - Have complete labels
  - Have proper DOT markings

Waste Transport

- On-post
  - Only by licensed PWE or DRMO drivers
- From off-post
  - Prior notification to PWE
    - DO NOT transport without paperwork, labels, and placards from PWE
    - Driven by CERTIFIED drivers ONLY
  - DO NOT transport waste off post

END

INSTALLATION MANAGEMENT COMMAND

"Sustain, Support and Defend"